

**REMARKS**

Claims 1-3, 8 and 10-18 are pending in this application. By this Amendment, non-elected claims 4-7, 9 and 19-32 are canceled without prejudice or disclaimer. Claims 1, 2, 8 and 10-12 are amended. No new matter is added. Reconsideration of the application is respectfully requested.

**I. Allowable Subject Matter**

Applicants gratefully acknowledge that the Office Action indicates that claims 12-18 including allowable subject matter. Specifically, the Office Action indicates that claims 12-18 would be allowable if rewritten in independent form including all features of the base claim and any intervening claims.

Claim 12 is rewritten in independent form. No new matter is added. Thus, claim 12 is allowable. Claims 13-18 depend from claim 12, and for at least this reason are also allowable.

**II. Rejection Under 35 U.S.C. §102(b)**

The Office Action rejects claims 1 and 10 under 35 U.S.C. §102(b) over U.S. Patent No. 4,219,853 to Albert et al. ("Albert"). Applicants respectfully traverse the rejection.

Albert does not teach or suggest a thin-film magnetic head or a slider including a "body having the first medium facing surface and a back surface; an insulating layer having a bottom surface exposed in the back surface; the thin-film coil and the magnetic-path-forming path are disposed above the top surface of the insulating layer; and first and second pole portion layers are disposed above the thin-film coil and exposed in the first medium facing surface," as recited in claims 1 and 10.

The Office Action asserts that Albert teaches a thin-film magnetic head including a recording head section having a first medium facing surface and a reproducing head section including a second medium facing surface, wherein the recording head section and

reproducing head section are bonded to each other so that the first medium facing surface and the second medium facing surface are continuous. See Fig. 2. Notwithstanding these assertions, Albert does not teach or suggest the dispositions of the thin-film coil, the magnetic-path-forming part, the insulating layer, the first medium facing surface, and the first and second pole portion layers as set forth in claims 1 and 10.

Albert teaches, in Figs. 1 and 2, an air bearing head slider including a read transducer 16, a separator insulator layer 44, and a write transducer 18. See col. 2, lines 10-24. Albert also teaches that the air bearing head slider assembly includes an air bearing surface 42 that flies over a rotating magnetic disk during read and write operations. See Fig. 1, and col. 3, lines 21-25. Further, Albert teaches that the write transducer 18 includes two Permalloy layers 32W, 38W separated by a write transducing gap 34W. See Fig. 2.

As shown in Fig. 2, the air bearing head slider assembly is a layered structure disposing layers of the read transducer 16, the separator layer 44, and layers of the write transducer 18 in a layered direction that extends parallel to a top surface of the air bearing surface 42. Therefore, ends (located near the air bearing surface 42) of the two Permalloy layers 32W, 38W and the write transducing gap 34W are located at a side surface with respect to the layered direction of the air bearing head slider assembly, not a top surface.

Since the medium facing surface of the write transducer 18 is located at the air bearing surface 42, the write transducer 18 back surface that is located on an opposite side from the air bearing surface 42 side would be located at a top most portion of Fig. 2. Therefore, the separation layer 44 does not include a bottom surface exposed in the back surface, i.e., the top-most portion in the drawings, of the write transducer 18. As a result of the layered direction of Albert extending in a direction parallel to the air bearing surface, i.e., horizontally in Fig. 2, Albert does not teach or suggest a layered structure of the thin-film magnetic head and slider of claims 1 and 10.

In the layered structure of thin-film magnetic head and slider of claims 1 and 10, a first medium facing surface (e.g., element 31 in Fig. 9) and end faces of a first pole portion layer (e.g., element 12 in Fig. 9) and a second pole portion layer (e.g., element 15 in Fig. 9) are located at a top surface in the direction that the layered structure extends, i.e., the stacking of the layers. Thus, portions of the layered structure is located between an insulating layer (e.g., element 2 in Fig. 9) and the first medium facing surface (e.g., element 31 in Fig. 9). This layered structure allows mass-production of the thin-film magnetic head and slider through a reduced number of manufacturing steps. Such results cannot be achieved by the air bearing head slider of Albert.

For at least these reasons, Albert does not teach or suggest each and every element of the thin-film magnetic head or slider of claims 1 and 10. Therefore, claims 1 and 10 are not anticipated by Albert. Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

### **III. Rejections Under 35 U.S.C. §103(a)**

The Office Action rejects claim 11 under 35 U.S.C. §103(a) over Albert. The Office Action also rejects claims 2, 3 and 8 under 35 U.S.C. §103(a) over Albert in view of U.S. Patent No. 5,610,783 to Maffitt et al. ("Maffitt"). Applicants respectfully traverse the rejections.

#### **A. Albert**

As discussed above, Albert does not teach or suggest a slider including a "body having the first medium facing surface and a back surface; an insulating layer having a bottom surface exposed in the back surface; the thin-film coil and the magnetic-path-forming path are disposed above the top surface of the insulating layer; and first and second pole portion layers are disposed above the thin-film coil and exposed in the first medium facing surface," as recited in claim 10.

Claim 11 depends from claim 10, and is allowable at least for the reasons that the features discussed above in connection with claim 10 would not have been rendered obvious by Albert. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

**B. Albert in view of Maffitt**

As discussed above, Albert does not teach or suggest a thin-film magnetic head including a "body having the first medium facing surface and a back surface; an insulating layer having a bottom surface exposed in the back surface; the thin-film coil and the magnetic-path-forming path are disposed above the top surface of the insulating layer; and first and second pole portion layers are disposed above the thin-film coil and exposed in the first medium facing surface," as recited in claim 1. Claim 8 includes such features.

Maffitt does not remedy the deficiencies of Albert. Maffitt teaches a thin-film magnetic head including a slider 40 including bond pads 82 and 84 adapted for electrical connection to a second read/write transducer 86 via respective connecting links 88 and 90. See Figs. 3A-6, and col. 6, lines 20-24. Maffitt does not teach or suggest a layered structure of a thin-film magnetic head. For at least these reasons, Maffitt, like Albert, does not teach or suggest a layered structure as set forth in claims 1 and 8. Accordingly, Albert and Maffitt, alone or in combination, would not have rendered obvious the thin-film magnetic head of claims 1 and 8.

Claims 2 and 3 depend from claim 1, and thus would not have been rendered obvious by Albert and Maffitt. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

**IV. Conclusion**

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-3, 8 and 10-18 are earnestly solicited.

Should the Examiner believe that anything further is desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned representative at the telephone number set forth below.

Respectfully submitted,



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